Mr. Powder
Ditto 88

Pre-Algebra
Name: _____

Multiply of divide the following:

1. $\sqrt{20}$

2. $\sqrt{48}$

3. $3\sqrt{96}$

4. $5\sqrt{72}$

5. $\sqrt{125b}$

6. $\sqrt{4x^2}$

7. $\sqrt{81m^3}$

8. $\sqrt{32m^5}$

9. $\sqrt{5} \bullet \sqrt{30}$

10. $\sqrt{50} \bullet \sqrt{18}$

11. $\sqrt{14x} \bullet \sqrt{2x}$

12. $\sqrt{3b^3} \bullet \sqrt{18b}$

13. $2\sqrt{a^4b^5}$

14. $\sqrt{64s^4t^3}$

15. $\sqrt{m^2n} \bullet \sqrt{n}$

16. $\sqrt{75xy} \bullet \sqrt{2x^3}$

17. $\sqrt{\frac{4}{49}}$

18. $\sqrt{\frac{7}{81}}$

19. $\sqrt{\frac{a^3}{121}}$

20. $\sqrt{\frac{100}{4x^2}}$

21. Which expression is equivalent to $\sqrt{\frac{9x}{16}}$?

a. $\frac{\sqrt{3x}}{4}$ b. $\frac{3\sqrt{x}}{4}$ c. $\frac{3\sqrt{x}}{16}$ d. $\frac{3x}{4}$

22. $2\sqrt{2}+6\sqrt{2}$ 23. $\sqrt{5}-6\sqrt{5}$ 24. $2\sqrt{6}-5\sqrt{54}$ 25. $9\sqrt{32}+\sqrt{2}$

26. $\sqrt{12}+6\sqrt{3}+2\sqrt{6}$ 27. $3\sqrt{7}-5\sqrt{14}+2\sqrt{28}$ 28. $\sqrt{5}\left(5-\sqrt{5}\right)$

29. $\sqrt{6}\left(7\sqrt{3}+6\right)$ 30. $\sqrt{3}\left(6\sqrt{2}-4\sqrt{3}\right)$ 31. $\left(4-\sqrt{2}\right)\left(5+\sqrt{2}\right)$

32. $\left(2\sqrt{5}+7\right)^2$ 33. $\left(\sqrt{7}+\sqrt{3}\right)\left(6+\sqrt{8}\right)$